



Building Blocks for the Wireless Internet Economy

Ron Smith

Corporate Vice President and General Manager
Wireless Communications and
Computing Group

August 23, 2000

Agenda

- Wireless Access to the Internet
- Building Blocks to Meet the Need
- New Application Development Paradigm

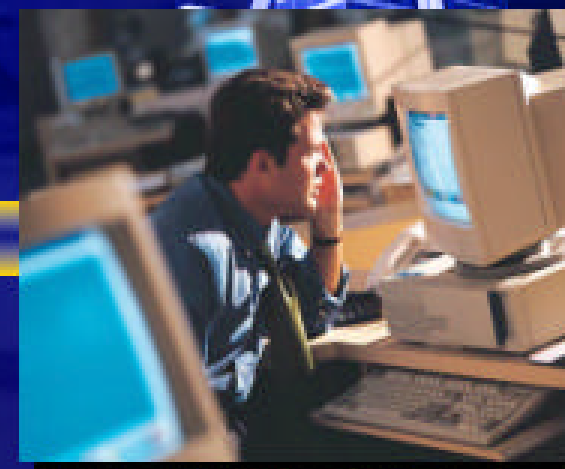
Agenda

- Wireless Access to the Internet
- Building Blocks to Meet the Need
- New Application Development Paradigm

The Internet



e-Home

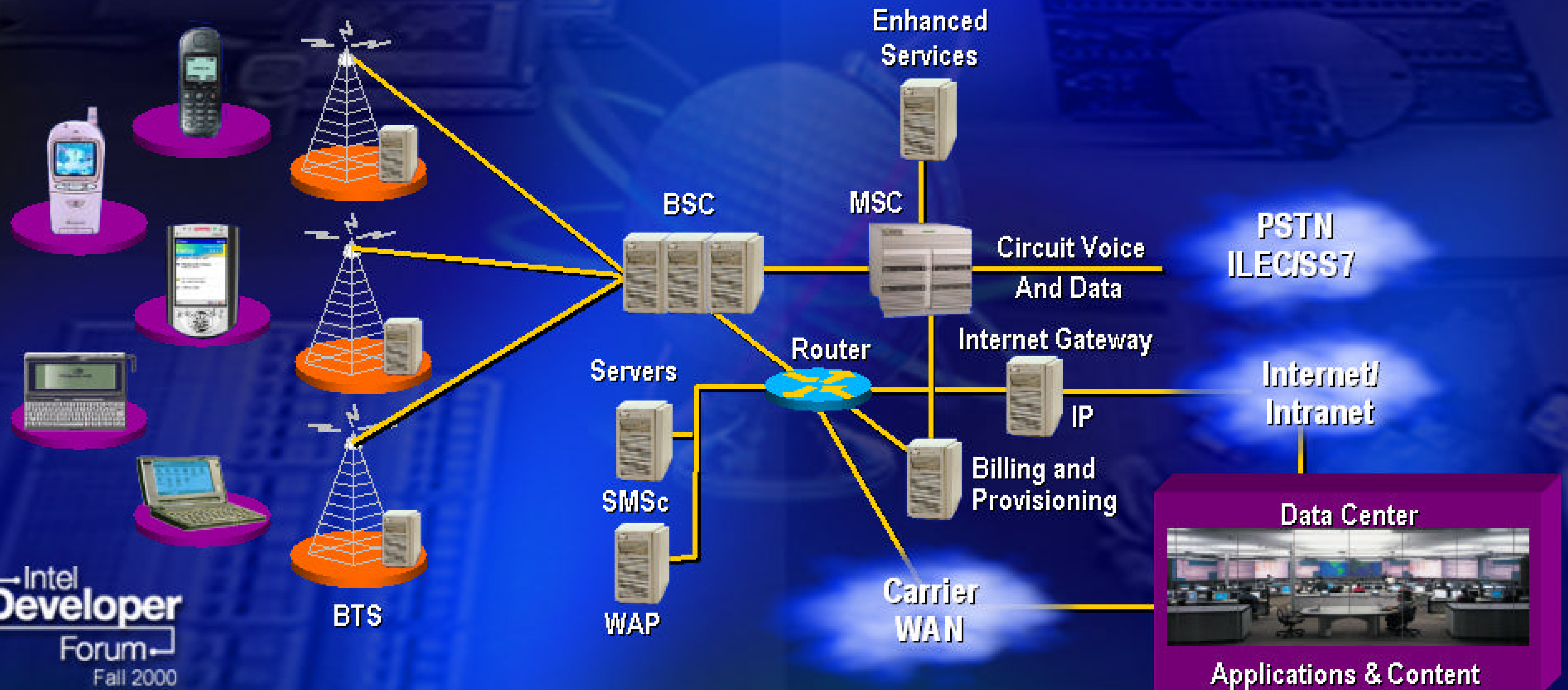


e-Business

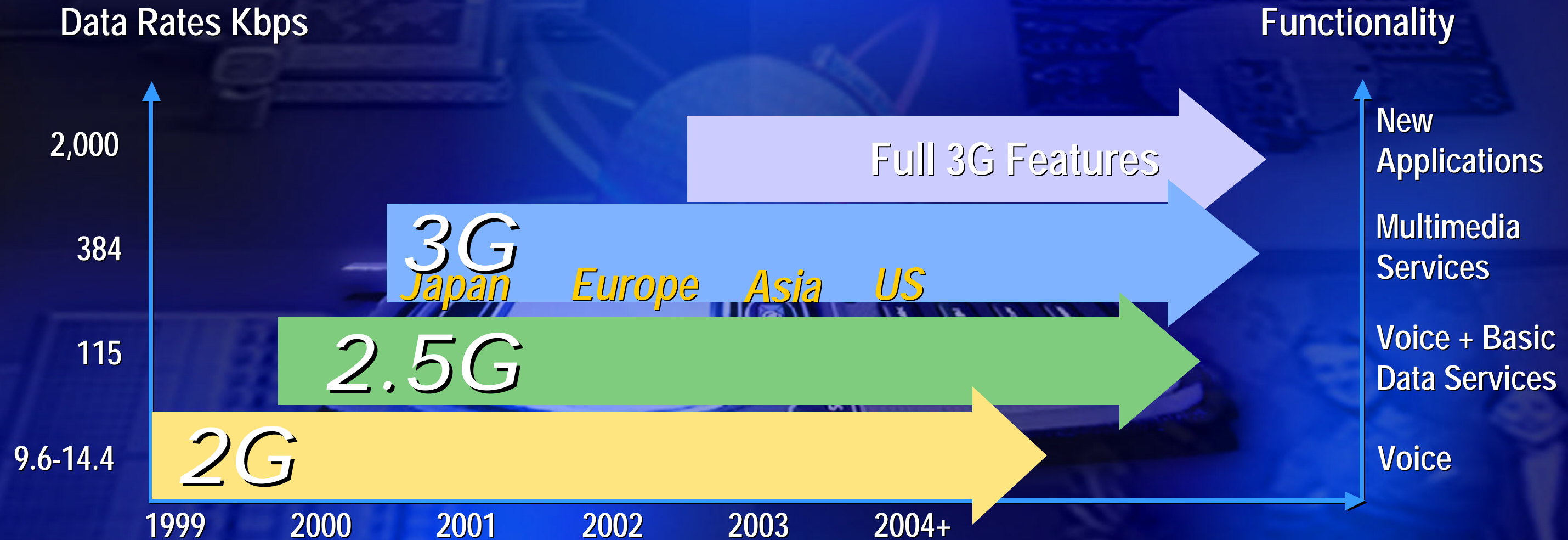


e-Everywhere

Wireless Access to the Internet



Cellular Transition



Infrastructure Requirements

- Increasing performance while maintaining low power
- Open, general purpose, and programmable to add new applications
- Scalable for build-out

Today's Wireless Terminal

Communications

Radio (RF)

Rx

Tx

PA

Signal Processing

DSP
Core

Analog

Baseband

Computing

CPU

Power
Mgmt.

Display

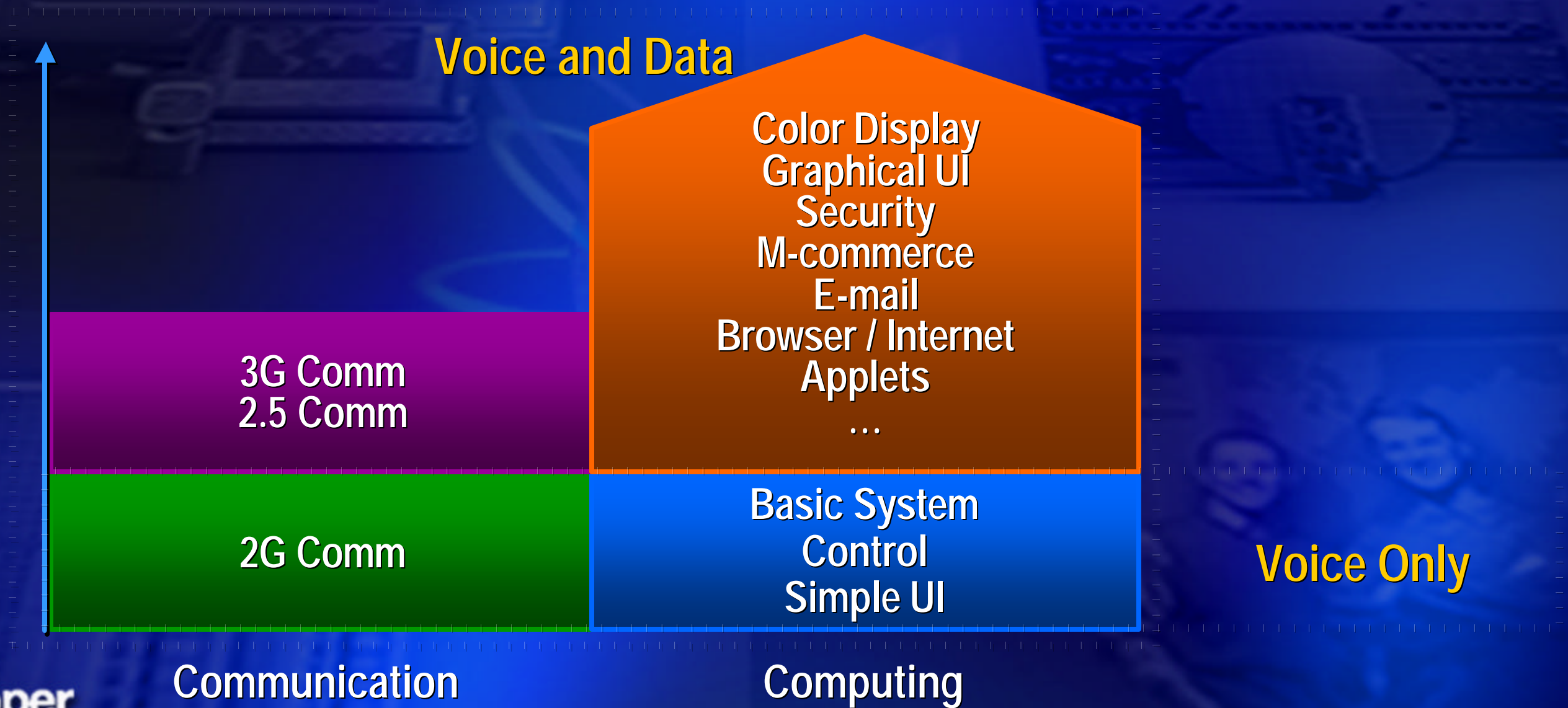
Peripherals

Memory

Flash

SRAM

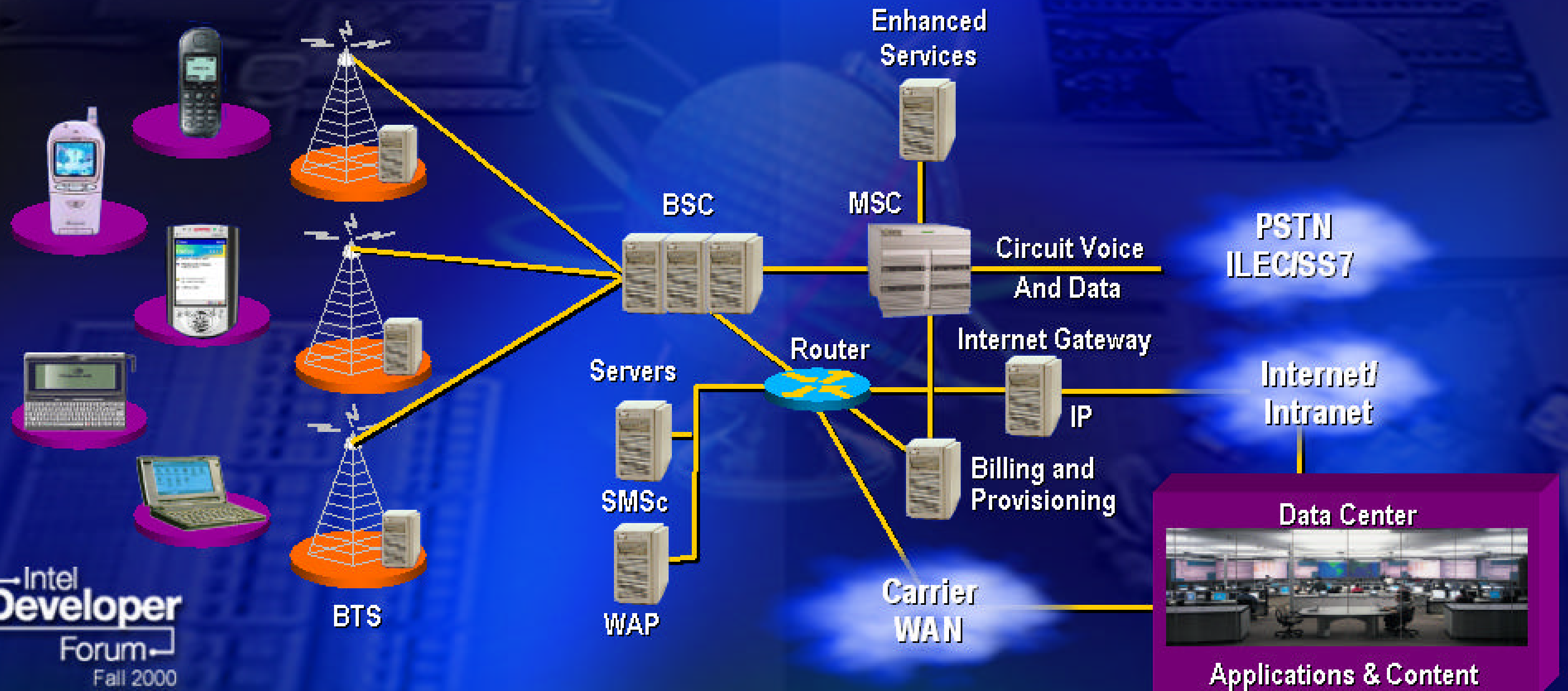
Internet Use Drives Changes



Agenda

- Wireless Access to the Internet
- Building Blocks to Meet the Need
- New Application Development Paradigm

Intel® Building Blocks



Intel® Building Blocks

Clients:

- Intel® Flash
- Intel® Flash Data Integrator
- StrongARM* processors
- Baseband Chipsets
- Signal Processing Solutions

Infrastructure:

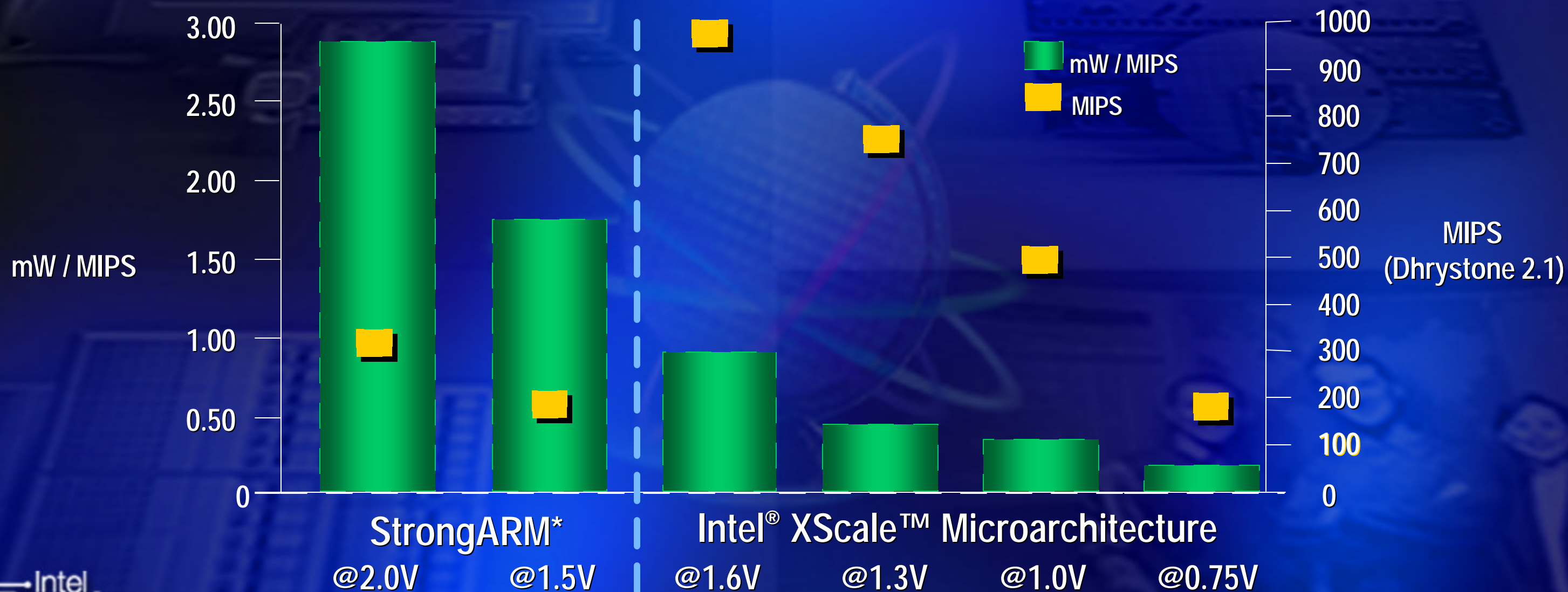
- Intel Pentium® III and Xeon™ processor-based servers
- Intel® Internet Exchange™ Architecture
- Networking Solutions

Introducing: Intel® XScale™ Microarchitecture

- Tailored to address handheld clients and internet infrastructure
- Delivers leading mW/MIPs performance
- Enhanced from the Intel® StrongARM* microarchitecture
- Extends Intel's portfolio of computing solutions
 - Integrated into multiple product roadmaps from handheld Internet devices to Internet infrastructure

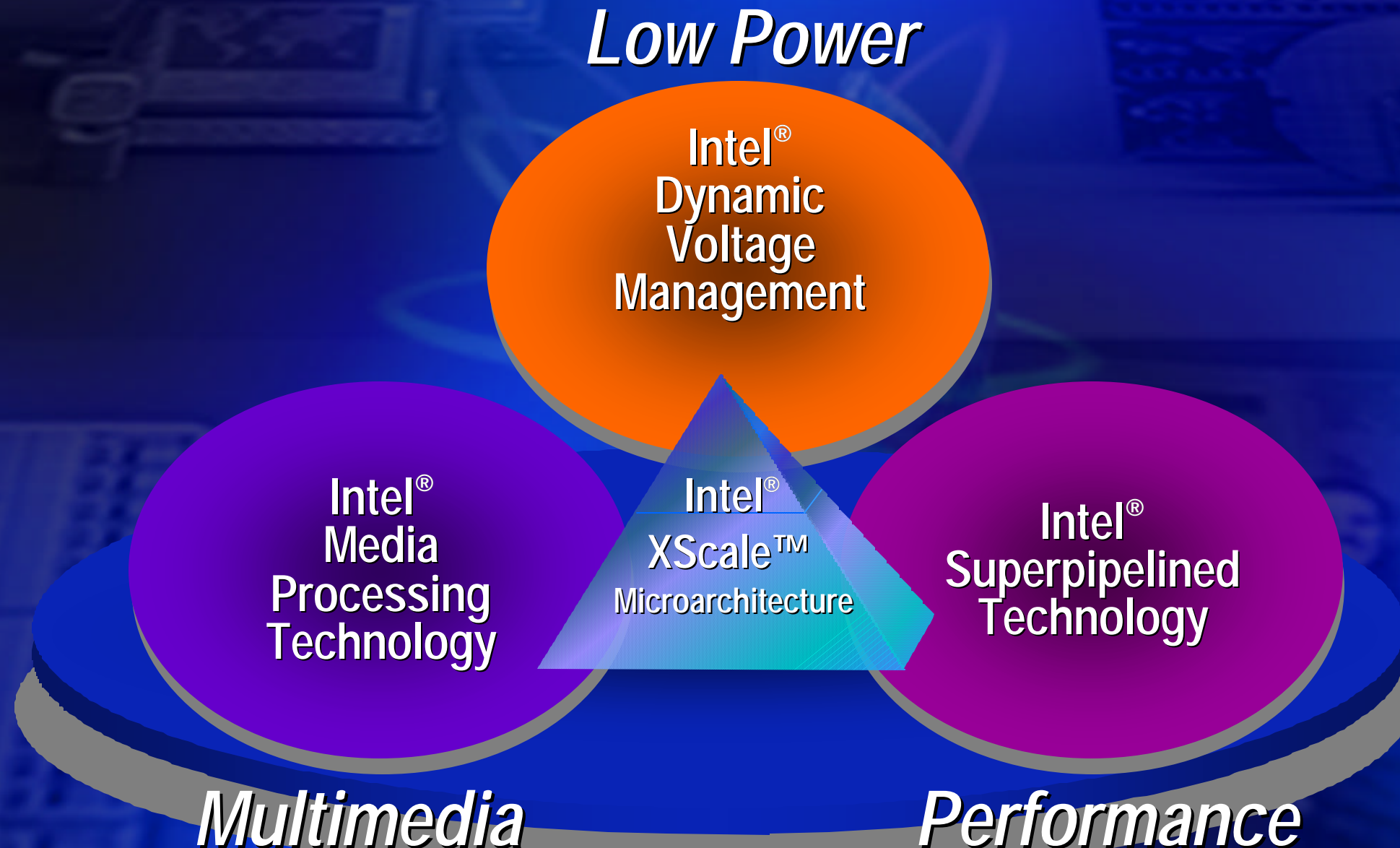
Intel® XScale™ Microarchitecture

Power/Performance

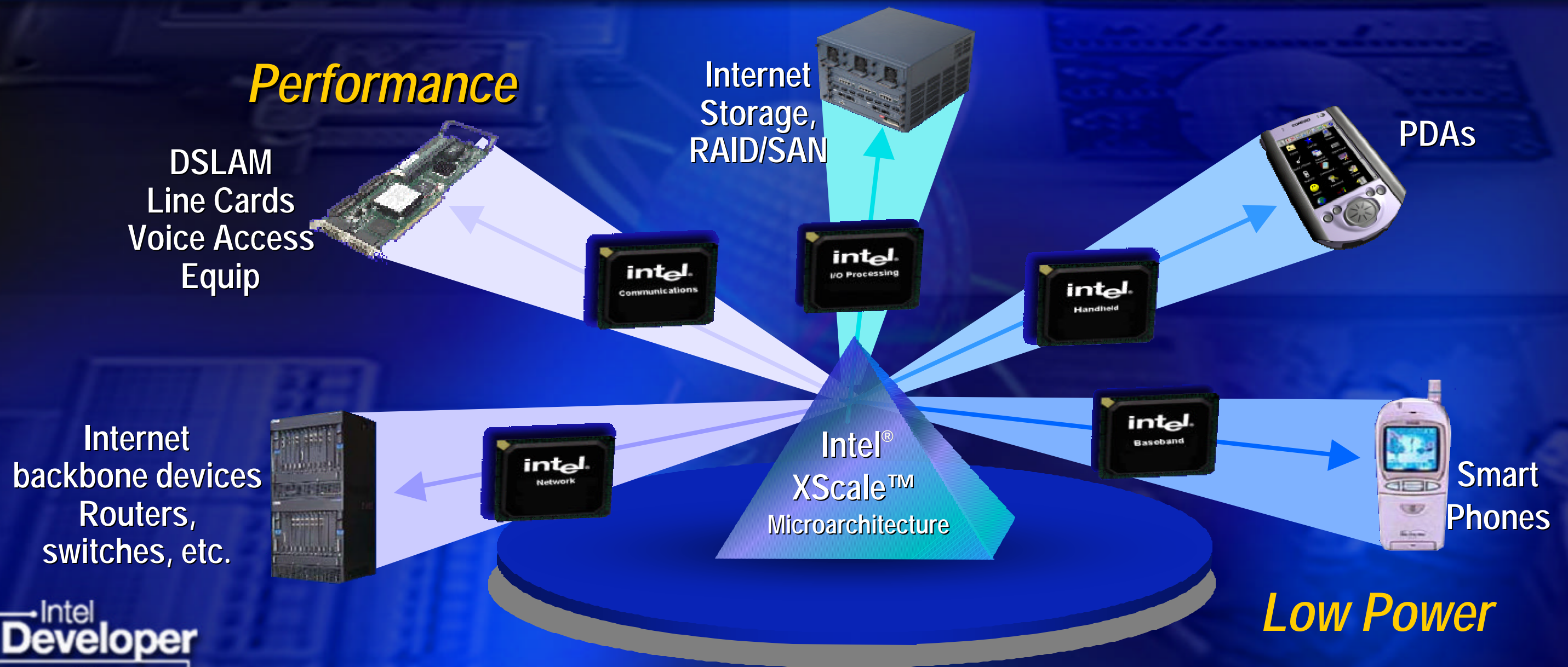


125MIPs at 20mW

Intel® XScale™ Microarchitecture Enhancements

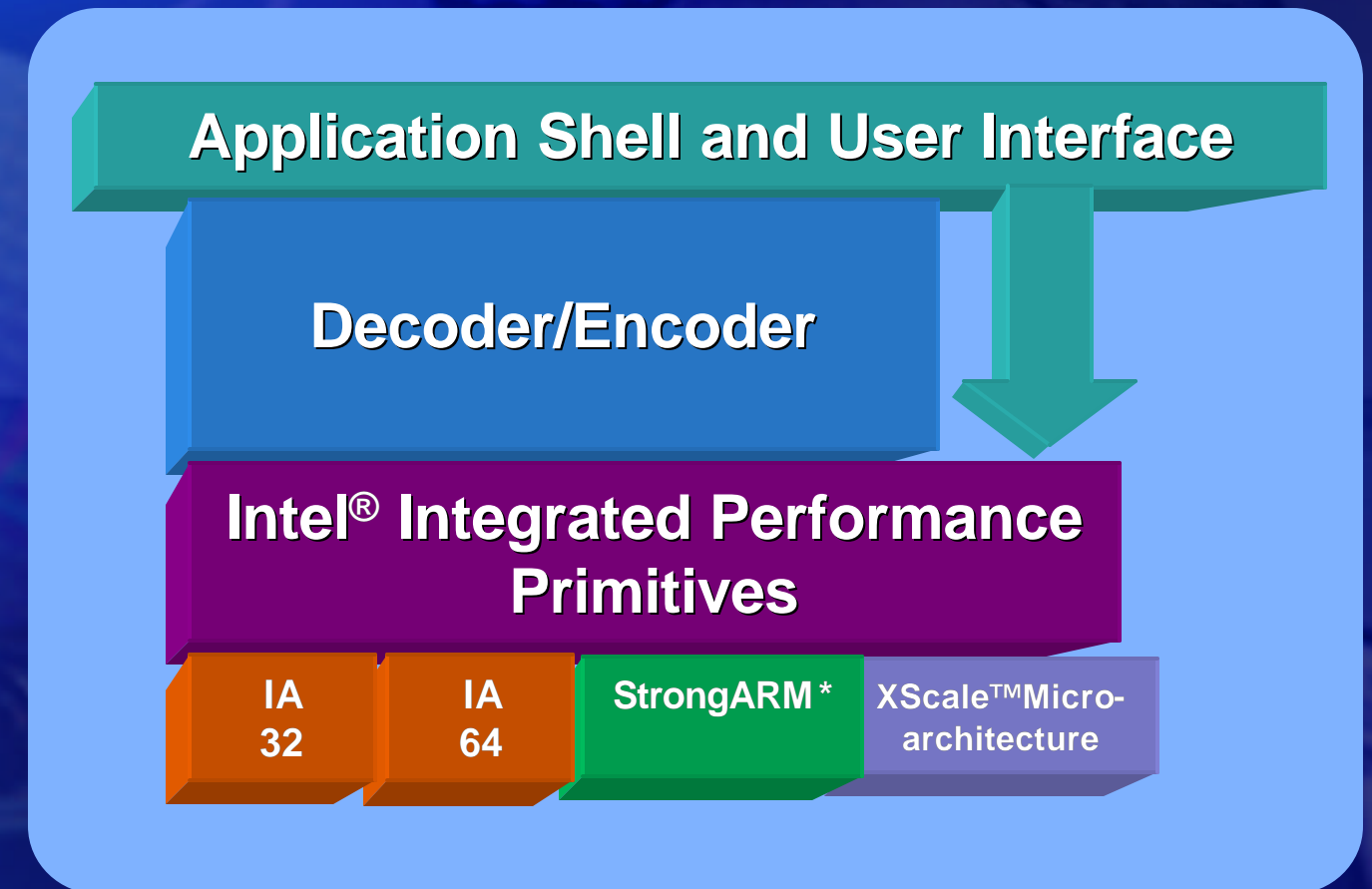


Future Intel® XScale™ Microarchitecture Solutions



Intel® Integrated Performance Primitives

- Pre-optimized libraries of code to speed time-to-market
 - Improved audio, video and graphics
 - Headroom for performance-intensive applications
 - OS Independent
- Available from Intel in 4Q 2000



Intel® XScale™ Microarchitecture

Optimized for Both Ultra Low Power and High Performance



Low Power
Technology
& Markets

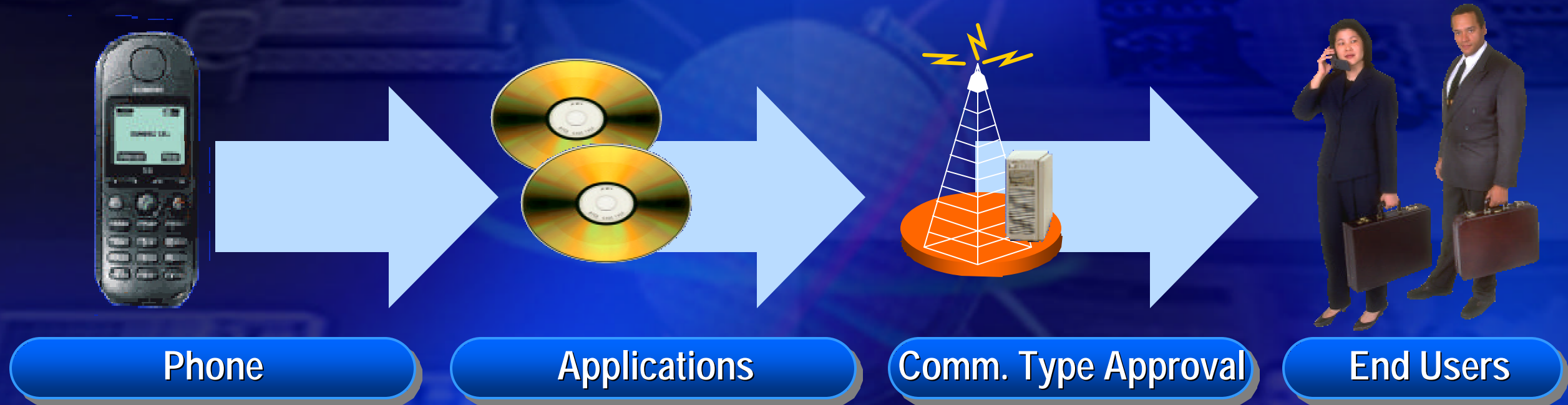
Intel®
XScale™
Microarchitecture

High Performance
Technology
& Markets

Agenda

- Wireless Access to the Internet
- New Building Blocks Enable
- New Application Development Paradigm

Application Delivery Today



- Serial development
- Applications require type approval
- Long pipeline for application and device delivery

Parallel Development Tomorrow

Communication



Clients



Applications



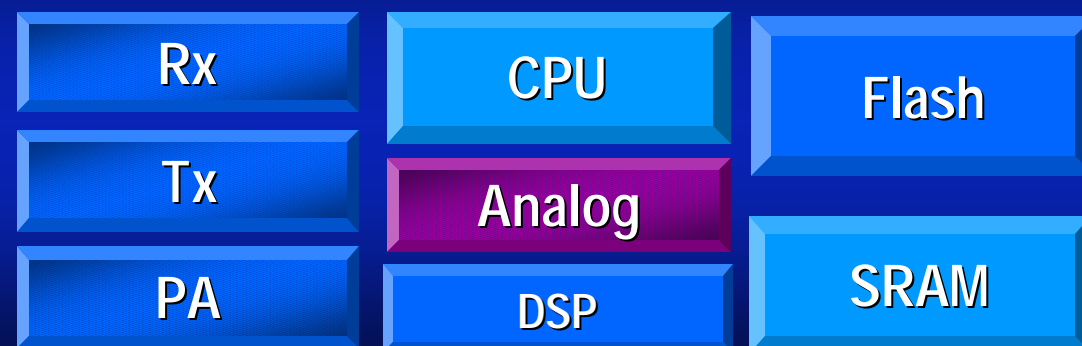
Independent Compute and Communication Stacks



Compute



Communications

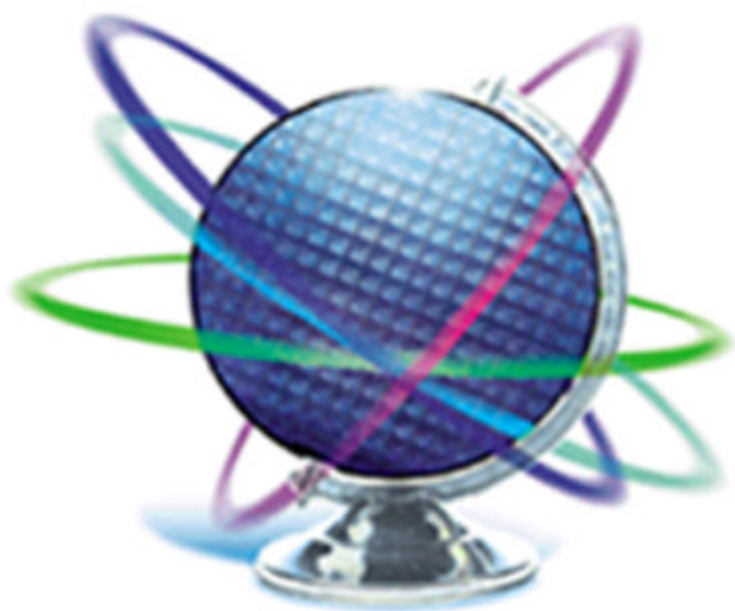


Intel® XScale™ Microarchitecture Enables New Paradigm

- Scalable via applications written to a general purpose processor
 - Leading power/performance
- Applications independent of communication stack

Summary: Your Opportunity

- Wireless access to the Internet brings opportunity:
 - New devices (hardware)
 - New applications (software)
- Intel® XScale™ Microarchitecture along with other Intel products enable this transition and the new application development paradigm



Intel Developer

Forum

Fall 2000

August 22 – 24



intel®

